New Research on Mechanisms in the Development of PF

Dr. Sonye Danoff: We're here on the last day of the Pulmonary Fibrosis Foundation Summit in Nashville, Tennessee. Today we had some really interesting talks about mechanisms in the development of pulmonary fibrosis. It may actually surprise you to know that we still don't really understand why pulmonary fibrosis occurs. The talks today really covered the gamut of different areas of the lung that might be involved with the development of pulmonary fibrosis.

The first talk was a very interesting talk looking at whether chaperone proteins that help clean up dead cells might actually be involved in sort of the propagation and the initiation of fibrosis. After that, we heard talks about different aspects of lung biology that might be involved including aspects like the immune system, the stiffness of the lung matrix, and epithelia-mesenchymal interactions. Some of these topics are familiar to us because epithelial-mesenchymal interactions have been something we've talked about over many years in the pulmonary fibrosis field. Some of them are a little bit newer and more unfamiliar, such as the mechanotransduction. This is the idea that cells may behave differently if they're on a stiff matrix that is a stiff lung. So, I think that these are going to be some the topics that we hear more about over the coming years and, as we learn more about the mechanisms, we'll learn about more pathways that might actually serve as targets for new drug therapy.